# New York State Department of Transportation Yellow Flag NB2228W022

By: Ben Colangelo

Flag Date: April 13, 2022

Superseding Information:

This flag supersedes: YF NB2122W038

## Structure Information

BIN: 1065318 Region: 11 - NEW YORK CITY

Feature Carried: 278I278IX2M23027 County: KINGS

Feature Crossed: 6TH AVENUE Political Unit: City of NEW YORK
Orientation: 8 - NORTHWEST Approximate Year Built: 1962

Posted Load Matches Inventory: Yes

Bridge Load Posting (Tons): Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp Number of Spans: 322

### **Verbal Notification Information**

Person Notified: Heinz Joachim, P.E. Date: April 13, 2022 2:00:00 PM

Of: NYSDOT Region 11

## Signature Information

Signature: Ben Colangelo, P.E. 068498 Date: June 08, 2022

Reviewed By: Robert Kemp Date: June 08, 2022

Attachments: 7

Flag Date: April 13, 2022

## Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 256			
	107 - Steel Open Girder/Beam	976	ft
	PR831 - Steel Beam End	40	each

## Flagged Condition Description

This Yellow Flag No. NB2228W022 supersedes Yellow Flag No. NB2122W038.

Location: Span 256 Girder G16 at Pier 256 over 3rd Avenue NB

Description: The web of the girder at the upper cope has a 1-3/4" long diagonal crack that extends into a ½" diameter corrosion hole. The surrounded web area of 11" H x 3" W has up to 3/16" deep section loss. (Photos 3, 4 and 5)

There has been no significant change since previous inspection.

The affected member Girder G16 is a load path redundant built-up steel girder consisting of varying web depth x 3/8" thick and two equal leg angles (L 5" x 5" x 1/2") for the top and bottom flanges (Photo 2). The spacing between Girder G15 and G16 is 3'-9.75" on center and 6'-11" on center from G17 (Photo 1).

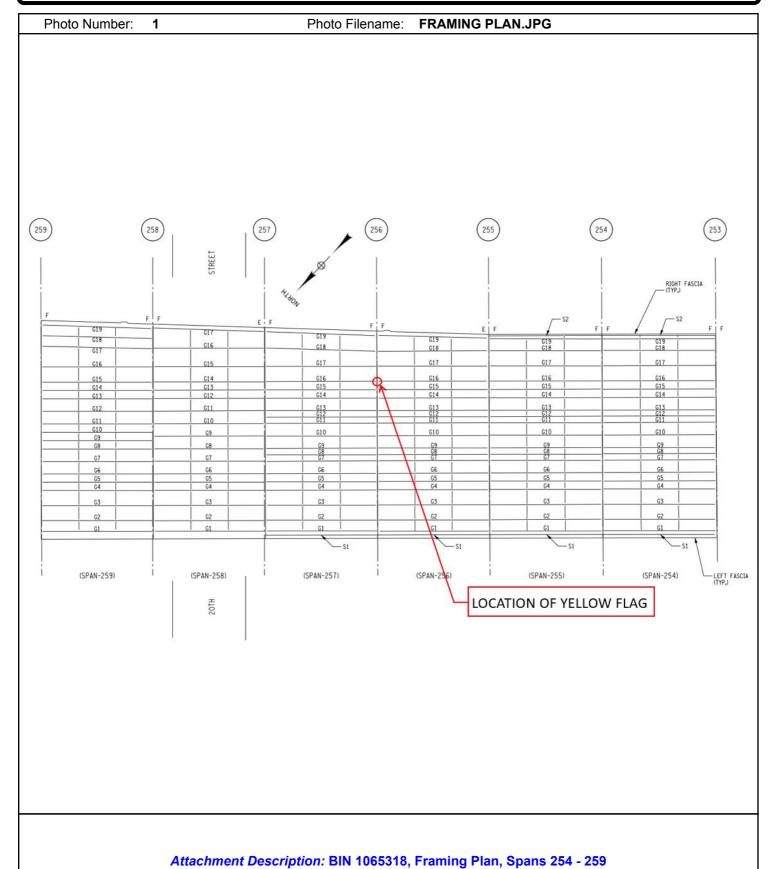
#### Notes:

- 1. No deformation was observed in any part of Girder G16 connection to Pier 256 cap beam.
- 2. The adjacent Girder G15 (left side) is in good condition. Girder G17 (right side) has web repair plates with moderate corrosion along the edges.
- 3. Left lane closure at 3rd Avenue In-Bound (Tunnel) between 20th and 21st Streets, and a 35' bucket truck is required to access this location.

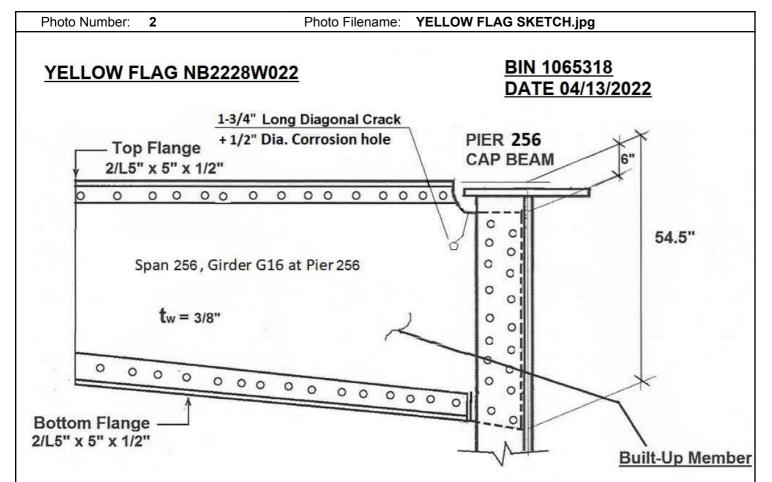
Page 2 of 9

Flag Date: April 13, 2022

## Flag Photographs



Flag Date: April 13, 2022



## Built-Up Member

## Properties

Vary depth web: 54.5" b-to-b Ls @ Piers 255 and 256 and 33" @

midspan

Web thickness =3/8"

Bottom and Top Flanges are two equal leg angles L 5" x 5" x 1/2"

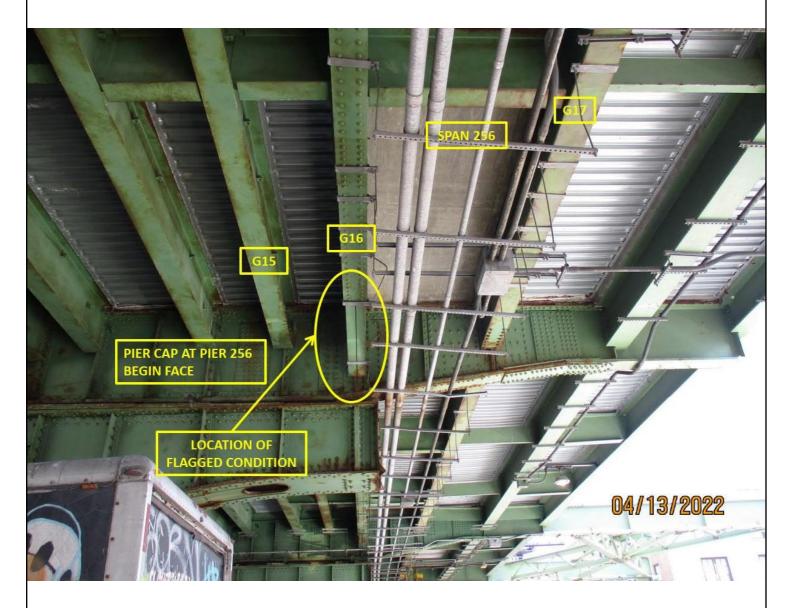
## Right Elevation of Girder G16 at Pier 256 (Looking Left)

N.T.S.

Attachment Description: Sketch of G16 at Pier 246

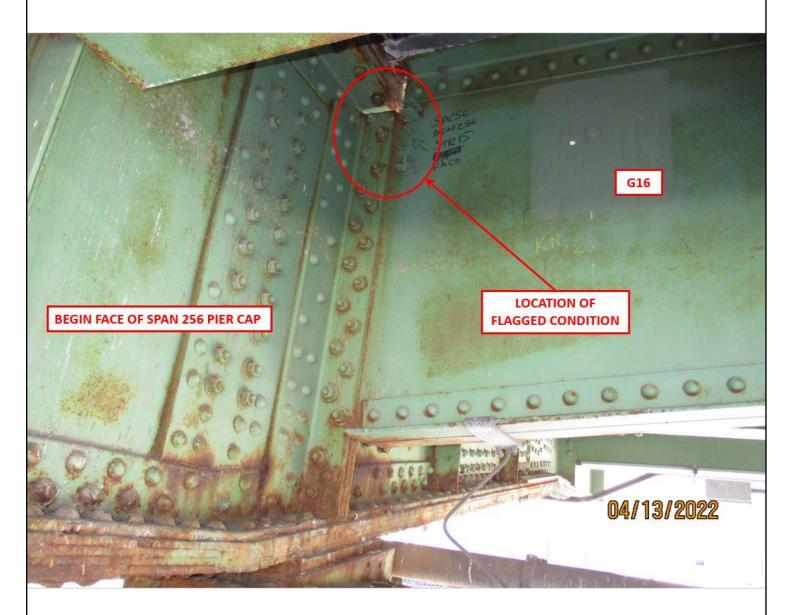
BIN 1065318 Flag Date: April 13, 2022

Photo Number: 3 Photo Filename: Photo 1 Edit JF-06-08.jpg



Attachment Description: Span 256 G16 at Pier 256 – General framing plan of flagged location. Looking End.

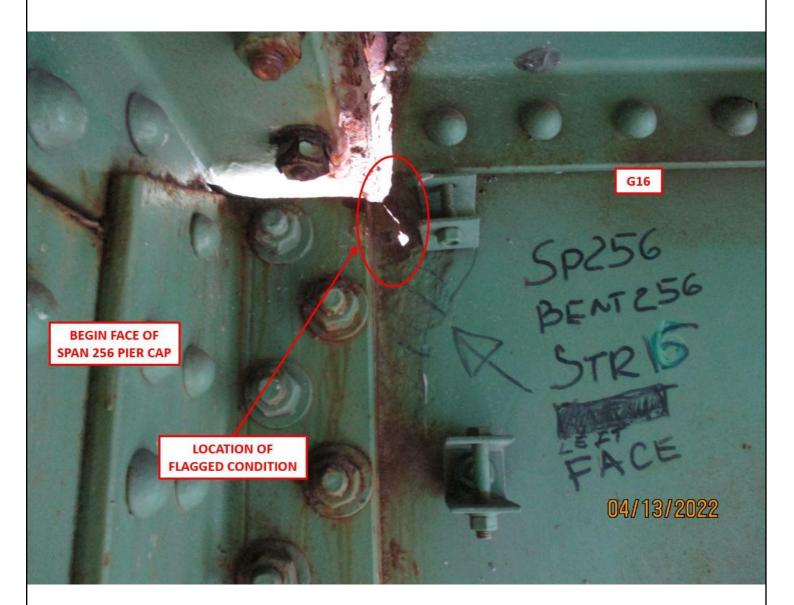
Photo Number: 4 Photo Filename: 318-3987.JPG



Attachment Description: Span 256 G16 at Pier 256 - General view of crack location at left upper cope. Looking End Right.

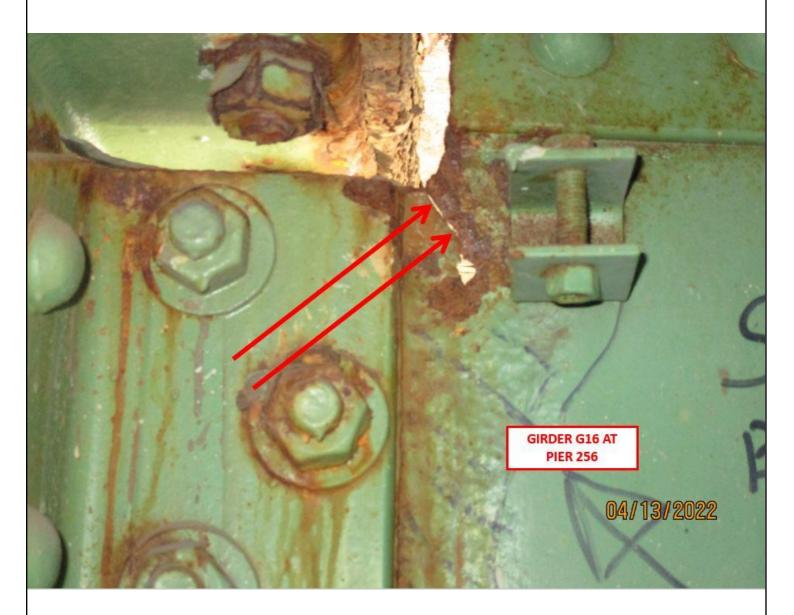
Yellow Flag NB2228W022 BIN 1065318 Flag Date: April 13, 2022

Photo Number: 5 Photo Filename: 318-3999.JPG



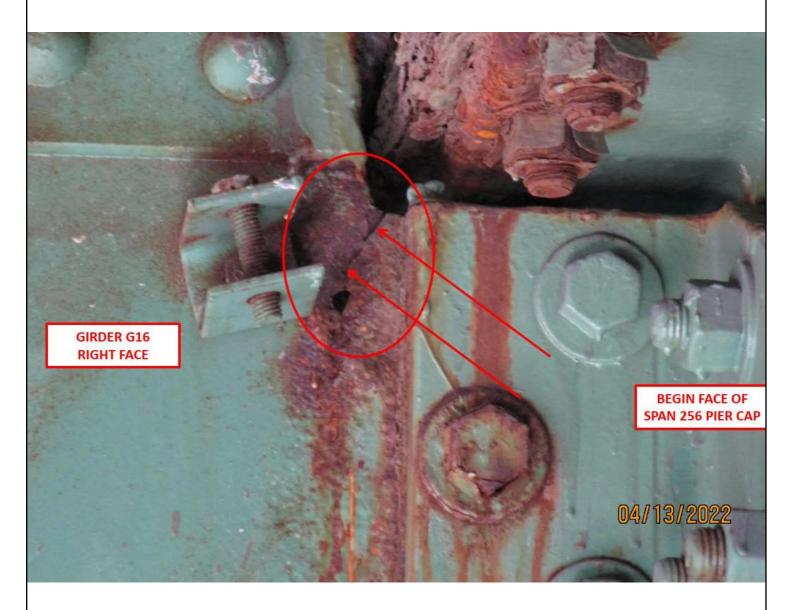
Attachment Description: Span 256 G16 at Pier 256 – General view of flagged location showing the 1-3/4" long diagonal crack at upper cope and ½" diameter corrosion hole. Surrounding 11" H x 3" wide area with up to 3/16" DP section loss. Looking Right.

Photo Number: 6 Photo Filename: 318-4006.JPG



Attachment Description: Span 256 G16 at Pier 256 – Close up view of the 1-3/4" long diagonal crack at upper cope and ½" diameter corrosion hole. Looking Right.

Photo Number: 7 Photo Filename: Photo 5 Edit JF.jpg



Attachment Description: Span 256 G16 at Pier 256 – Close up view of the 1-3/4" long diagonal crack at upper cope and ½" diameter corrosion hole. Looking Left.